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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/298,603	04/23/1999	BORIS KLOTS	50277210	2232
29989	7590	08/05/2004	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP 1600 WILLOW STREET SAN JOSE, CA 95125			VU, THONG H	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/298,603	Applicant(s) KLOTS ET AL.	
	Examiner Thong H Vu	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 0611.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-9,16-23,25-28 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9,16-23,25-28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-4,6-9,16-23,25-28, 30-32 are pending.

Response to Arguments

2. Applicant's arguments, filed 6/11/04, with respect to the rejection(s) of claim(s) 1-4,6-9,16-23,25-28,30-32 under Aahlad and Misheski have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Boutcher and the well-known art.

Claim Rejections - 35 USC § 112

3. Claim 1 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention (i.e.: It is unclear that How the first work is sent to a third node to execute and what node provides a second work request to a third process on the third node).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4,6-9,16-23,25-28 are rejected under 35 U.S.C. § 103 as being obvious over Boutcher [6,493,768 B1] in view of obviousness of the art.

5. As per claim 1, Boutcher discloses a method for processing data on a distributed computing system that includes a plurality of nodes [Boutcher, a distributing computer system, Fig 1, col 4 lines 25-45], the method comprising the steps of:

in response to receiving a first work request to perform first work from a first process on a first node from the plurality of nodes, determining based upon the first work and the mapping data, that the first work is to be performed on a second node from the plurality of nodes [Boutcher, many different version mapping, col 8 lines 57-65; col 10 lines 5-10; 27-57; the first mapping is a direct mapping, col 8 line 65-col 9 line 4];

providing the first work request to a second process on the second node, wherein the first work request specifies that the first process is to directly receive results of the first work [Boutcher, responding according to the mapping indication includes directly mapping a first version of RPC defined by the upgraded remote procedure interface to a second version of the RPC defined by the prior remote procedure interface, col 14 lines 5-9,62-67;col 15 lines 52-57];

However Boutcher does not explicitly disclose

determining based upon the first work and the mapping data, that the first work is also to be performed on a third node from the plurality of nodes (i.e.: MAP request) , and providing a second work request to a third process on the third node (i.e.: HANDLE request) wherein the second work request specifies that results of the first work performed on the third node is provided directly to the first process.

A skilled artisan would find the motivation to modify the process of a particular routine for version map by user defined procedure [Boutcher, col 11 lines 50-col 12 lines

5] to make a specifies work that can be performed by remote node (i.e.: a third node with network directory) and the second request to the third mapping process [Boutcher, col 9 lines 13-25] wherein the result (of a first or second work) is provided directly to the first process [Boutcher, a direct mapping, col 8 line 65-col 9 line 4] including the first, second and third mapping [Boutcher, col 8 line 65-col 9 line 25] and the third way would provide the result to the first node request process [Boutcher, the client can look up to the server in the network directory, and generally obtain additional information from the server, such as exactly what interfaces and protocols it supports, col 10 lines 12-26].

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the technique of using the second work request specifies that results of the first work performed on the third node is provided directly to the first process as an alternative of the direct mapping process. Doing so would provide a dynamic and efficient process to implementing distributed computer system by programming using the PRC by sending the result directly to the first client request.

6. Claims 16,20 contain the similar limitations set forth of method claim 1, except the director (or Map request routine and handle request routine)[Boutcher, col 11 lines 32-col 13 line 37]. Therefore, claims 16,20 are rejected for the similar rationale set forth in claim 1.

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7. As per claims 2,21 Boutcher discloses including the steps of in response to receiving a second request to perform second work from the first process, determining that the second work is to be performed on a third node from the plurality of nodes, and providing the second request to a third process on the third node, wherein the second request specifies that the first process is to receive results of the second work directly from the third process as inherent features of RPC and direct mapping.

8. As per claims 3,22 Boutcher discloses including the steps of in response to receiving a second request to perform second work from a third process on a third node from the plurality of nodes, determining based upon the second work and the mapping data, that the second work is to be performed on the second node, and providing the second request to the second process, wherein the second request specifies that the third process is to receive results of the second work directly from the second process as inherent features of RPC and direct mapping.

9. As per claims 4,23 Boutcher discloses including the steps of in response to receiving a second request to perform second work from a third process on a third node from the plurality of nodes, determining based upon the second work and the mapping data, a fourth node from the plurality of nodes on which the second work is to be performed, and providing the second request to a fourth process on the fourth node, wherein the second request specifies that the third process is to receive results of the

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second work directly from the fourth process as inherent features of RPC and direct mapping.

10. As per claims 6,25 Boutcher discloses the step of determining that the first work is to be performed on a second node includes the step of determining one or more resources required to perform the first work, and determining which of the plurality of nodes is allowed to perform the first work on the one or more resources v.

11. As per claims 7,26 Boutcher discloses the step of determining that the first work is to be performed on a second node from the plurality of nodes includes the step of a director determining that the first work is to be performed on a second node from the plurality of nodes, and the step of providing the first work request to a second process on the second node includes the step of the director providing the first work request to a second process on the second node as inherent features of RPC and direct mapping.

12. As per claims 8,27 Boutcher discloses the step of upon completion of the first work, the second process providing the results of the first work directly to the first process as inherent features of RPC and direct mapping.

13. As per claims 9,28 Boutcher discloses the first work request is a remote procedure call [Boutcher , RPC, col 6 lines 1-15].

14. As per claim 17, Boutcher discloses the director is further configured to provide the first work request to the second process [Boutcher, MAP request routine, Handle request routine, col 11 lines 32-col 123 line 37].

15. As per claim 18, Boutcher discloses the director is further configured to generate a second work request to requests that the second process perform the first work and provide the first results directly to the first process, and provide the second work request to the second process [Boutcher, MAP request routine, Handle request routine, col 11 lines 32-col 123 line 37].

16. As per claim 19, Boutcher discloses resource data that specifies the access rights of the plurality of nodes relative to resources as inherent feature of client-server communications.

17. As per claim 31, Boutcher discloses the similar limitations set forth of method claim 1 [see rejection claim 1], except generating an updated first work request that specifies that the first process is to directly receive results of performing the first work as inherent features of RPC and direct mapping.

18. Claims 30 and 32 are rejected for the similar rationale set forth in claim 31.

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19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (703)-305-4643.

The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Harvey*, can be reached at (703) 305-9705.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9700.

Any response to this action should be mailed to: Commissioner of Patent and Trademarks, Washington, D.C. 20231 or faxed to :

After Final (703) 746-7238

Official: (703) 746-7239

Non-Official (703) 746-7240

Hand-delivered responses should be brought to Crystal Park 11,2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Thong Vu
Patent Examiner
Art Unit 2142

